

CURRICULUM VITA

Dr. Guy B. Oldaker III

PERSONAL INFORMATION

Address:

REDACTED

EDUCATION

1972, B.A., Chemistry, University of Virginia

1979, Ph.D., Chemistry, Virginia Polytechnic Institute & State University (VPI&SU)

EMPLOYMENT HISTORY

1985-present

Senior Staff R&D Chemist, R.J. Reynolds Tobacco Company, Winston-Salem, North Carolina

Engaged in surveys to assess ETS exposure and to evaluate indoor air quality. Developed methods and methodology for conducting surveys. Overseen investigations to evaluate ETS mitigation strategies.

1987-1988

Executive Director, Center for Indoor Air Research, Inc. (Position held in conjunction with duties at R.J. Reynolds Tobacco Company)

Was responsible for the technical and administrative oversight of six multidisciplinary contracts investigating indoor air quality issues.

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1978-1985

Senior Projects Manager, Entropy Environmentalists, Inc., Research Triangle Park, North Carolina.

Was nationally recognized expert on the measurement and monitoring of air pollutant emissions from stationary sources. Was Company's Chief Chemist and Quality Assurance Coordinator for projects contracted by U.S. Environmental Protection Agency (EPA). Developed several EPA Reference Methods and procedures for determining emissions. Wrote policy and procedural documents for the U.S. EPA. Managed project teams sampling emissions from stationary sources.

1977-1978

Instructor, VPI&SU, Blacksburg, Virginia.

Taught Freshman Chemistry and Organic Chemistry

1977

Substitute Teacher, Montgomery County School System, Virginia.

Taught science at the Middle School level.

1977

Free Lance Artist, Blacksburg, Virginia.

Was commissioned to prepare visual materials for Freshman Chemistry laboratory program at VPI&SU.

1975-1977

Graduate Teaching Assistant, VPI&SU, Blacksburg, Virginia

Taught laboratory sections for Freshman and Organic Chemistry and Inorganic and Organic Synthetic Chemistry.

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1972-1975

Chemistry Teacher, Albemarle High School, Albemarle County, Virginia

Taught general chemistry; was assistant coach for Cross Country, Indoor Track, and Spring Track

AWARDS

Certificate of Teaching Excellence, VPI&SU, 1978

Phi Lambda Upsilon (chemistry honor society), VPI&SU, 1978

Excalibur Award, R.J. Reynolds Tobacco Company, 1989

SCIENTIFIC PRESENTATIONS

1. Oldaker, G.B. III "Condensable Particulate Matter and Its Effect on EPA Method 5," EPA Workshops on Quality Assurance for Emission Measurements, Research Triangle Park, NC; Dallas, TX; San Francisco, CA, 1979.
2. Oldaker, G.B. III "Overview of EPA Methods for Stationary Sources," EPA Workshops on Quality Assurance for Emission Measurements, Dallas, TX, and San Francisco, CA, 1979.
3. Oldaker, G.B. III "Introduction to Continuous Emission Monitoring," EPA Workshops, New York, NY; Lexington, MA; Montpelier, VT; Annapolis, MD; Chicago, IL; Minneapolis, MN; Indianapolis, IN; Lansing, MI; Des Moines, IA; Kansas City, MO; Denver, CO; Rapid City, SD; Cheyenne, WY; and Boise, ID, 1978-1984.
4. Oldaker, G.B. III "Overview of EPA Methods 7A, 7C, 7D, and 7E," National Symposium on Continuous Emission Monitoring, Washington, DC (10/83).
5. Oldaker, G.B. III; and Conrad, F.W., Jr. "Estimation of the Effect of Environmental Tobacco Smoke (ETS) on Air Quality within Aircraft Cabins," paper number 54, 40th Tobacco Chemists' Research Conference, Knoxville, TN (10/15/86).
6. Ingebrethsen, B.J.; Heavner, D.L.; Angel, A.L.; Conner, J.M.; and Oldaker, G.B. III "A Comparative Study of Environmental Tobacco Smoke Particulate Mass

Measurements in an Environmental Chamber," paper number 53, 40th Tobacco Chemists' Research Conference, Knoxville, TN (10/15/86).

7. Conner, J.M.; Murphy, J.J.; Oldaker, G.B. III^{*}; Green, C.R.; and Angel, A.L. "Development of a Method for Estimating the Contribution of Environmental Tobacco Smoke to Indoor Respirable Suspended Particulates (RSP)," paper number 43, 40th Tobacco Chemists' Research Conference, Knoxville, TN (10/15/86).
8. Oldaker, G.B. III; and Conrad, F.W., Jr. "Effect of Environmental Tobacco Smoke (ETS) on Air Quality within Aircraft Cabins," International Experimental Toxicology Symposium on Passive Smoking, Essen, West Germany (10/24/86).
9. Ingebrethsen, B.J.; Heavner, D.L.; Angel, A.L.; Conner, J.M.; Oldaker, G.B. III^{*}; and Green, C.R. "A Comparative Study of Environmental Tobacco Smoke Particulate Mass Measurements in an Environmental Chamber," International Experimental Toxicology Symposium on Passive Smoking, Essen, West Germany (10/24/86).
10. McConnell, B.C.; Perfetti, P.F.; Walsh, R.F.; Oldaker, G.B. III; Conrad, F.W., Jr.; Heavner, D.L.; Conner, J.M.; Ingebrethsen, B.J.; Eudy, L.W.; Ogden, M.W.; Stancill, M.W. "Development and Evaluation of Portable Air Sampling System (PASS) for Environmental Tobacco Smoke (ETS)," paper number 29, 41st Tobacco Chemists' Research Conference, Greensboro, NC (10/6/87).
11. Conner, J.M., Conrad, F.W., Jr.; McConnell, B.C.; Ogden, M.W.; Oldaker, G.B. III; Perfetti, P.F.; Stancill, M.W.; Crouse, W.E.; and Fenner, R.A. "Results from Survey of Environmental Tobacco Smoke (ETS) in Offices and Restaurants in New York City," paper number 30, 41st Tobacco Chemists' Research Conference, Greensboro, NC (10/6/87).
12. Oldaker, G.B. III; Perfetti, P.F.; Conrad, F.W., Jr.; Conner, J.M.; and McBride, R. L. "Results from Surveys of Environmental Tobacco Smoke in Offices and Restaurants," International Conference on Indoor Air Quality, Tokyo, Japan (11/4/87).
13. Oldaker, G.B. III, Seminar on Portable Air Sampling System (PASS) and its use for surveying ETS; presented to faculties representing the University of Hong Kong, the Chinese University of Hong Kong, Hong Kong Polytechnic, and Hong Kong Baptist College; Hong Kong (12/9/87).
14. Oldaker, G.B. III; and McBride R.L. "Portable Air Sampling System for Surveying Levels of Environmental Tobacco Smoke in Public Places," Symposium on Environment and Heritage. World Environment Day Hong Kong 1988, Hong Kong University, Hong Kong (6/6/88).

15. Crouse, W.E.; Ireland, M.S.; Johnson, J.M.; Striegel, R.M., Jr.; Williard, C.S.; DePinto, R.M.; Oldaker, G.B. III; and McBride, R.L. "Results from a Survey of Environmental Tobacco Smoke (ETS) in Restaurants," APCA International Speciality Conference on Combustion Processes and the Quality of the Indoor Environment, Niagara Falls, NY (9/28/88).
16. Oldaker, G.B. III; Stancill, M.W.; Conrad, F.W., Jr.; Birdsong, B.N.; Fenner, R.A.; Lephardt, J.O.; Baker, P.G.; Lyons-Hart, J.; and Parrish, M.E. "Results from Survey of Environmental Tobacco Smoke in Passenger Cabins of B747 Aircraft," paper number 51, 42nd Tobacco Chemists' Research Conference, Lexington, KY (10/4/88).
17. Crouse, W.E.; Ireland, M.S.; Johnson, J.M.; Striegel, R.M., Jr.; Williard, C.S.; Oldaker, G.B. III; and McBride, R.L. "Results from a Survey of Environmental Tobacco Smoke (ETS) in Restaurants," paper number 50, 42nd Tobacco Chemists' Research Conference, Lexington, KY (10/4/88).
18. Nystrom, C.W.; Oldaker, G.B. III; and Conrad, F.W., Jr. "Evaluation of Nicotine Passive Sampling Device for Estimating Exposure to Environmental Tobacco Smoke," paper number 47, 42nd Tobacco Chemists' Research Conference, Lexington, KY (10/4/88).
19. Oldaker, G.B. III; Crouse, W.E.; and DePinto, R.M. "On the Use of Environmental Tobacco Smoke Component Ratios," International Conference on the Present and Future of Indoor Air Quality, Brussels, Belgium (2/14/89).
20. Oldaker, G.B. III; and Conrad, F.W., Jr. "Results from Measurements of Nicotine in a Tavern," Environmental Protection Agency/Air and Waste Management Association International Symposium. Measurement of Toxic and Related Air Pollutants, Raleigh, NC (5/4/89).
21. Ogden, M.W.; Nystrom, C.W.; Oldaker, G.B. III; and Conrad, F.W., Jr. "Evaluation of a Personal Passive Sampling Device for Determining Exposure to Nicotine in Environmental Tobacco Smoke," Environmental Protection Agency/Air and Waste Management Association International Symposium. Measurement of Toxic and Related Air Pollutants, Raleigh, NC (5/4/89).
22. Oldaker, G.B. III. "Portable Air Sampling System for Surveying Levels of Environmental Tobacco Smoke in Public Places," Indoor Air Quality Seminar, North Carolina A&T State University, Greensboro, NC, (5/8/89).
23. Oldaker, G.B. III; Ogden, M.W.; Maiolo, K.C.; Conner, J.M.; Conrad, F.W., Jr.; Stancill, M.W.; and DeLuca, P.O. "Results from Surveys of Environmental Tobacco Smoke in Restaurants in Winston-Salem, North Carolina," 43rd Tobacco Chemists' Research Conference, Richmond, Virginia (10/5/89).

24. DeLuca, P.O.; Stancill, M.W.; Conrad, F.W., Jr.; and Oldaker, G.B. III* "A Study of the Performance of an Air Cleaning Device Installed at a Local Hospital," 43rd Tobacco Chemists' Research Conference, Richmond, Virginia (10/5/89).
25. Ogden, M.W.; Maiolo, K.C.; Oldaker, G.B. III*; Conrad, F.W., Jr.; Stancill, M.W.; Conner, J.M.; and DeLuca, P.O. "Evaluation of Methods for Estimating the Contribution of ETS to Levels of Respirable Suspended Particles," 43rd Tobacco Chemists' Research Conference, Richmond, Virginia (10/50/89).
26. Crouse, W.E.; and Oldaker, G.B. III* "Comparison of Area and Personal Sampling Methods for Determining Nicotine in Environmental Tobacco Smoke," presented at the 1990 EPA/A&WMA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC (5/2/90).
27. Nelson, P.R.; Heavner, D.L.; and Oldaker, G.B. III* "Predictive Value of Nicotine as an Environmental Tobacco Smoke Marker," presented at the 1990 EPA/A&WMA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC (5/2/90).
28. Oldaker, G.B. III; Ogden, M.W.; Maiolo, K.C.; Conner, J.M.; Conrad, F.W., Jr.; and DeLuca, P.O. "Results from Surveys of Environmental Tobacco Smoke in Restaurants in Winston-Salem, North Carolina," presented at the 5th International Conference on Indoor Air Quality and Climate," Toronto, Ontario, Canada, (7/31/90).
29. Ogden, M.W.; Maiolo, K.C.; Oldaker, G.B. III*; Conrad, F.W., Jr.; Conner, J.M.; and DeLuca, T.C. "Evaluation of Methods for Estimating the Contribution of ETS to Levels of Respirable Suspended Particles," presented at the 5th International Conference on Indoor Air Quality and Climate," Toronto, Ontario, Canada (7/31/90).

* Coauthor

PUBLICATIONS

1. Oldaker, G.B. III; Perfetti, T.A.; and Ogliaruso, M.A. "Reactions of Polyarylated Carbinols. 6. Kinetics of the (1, 5) Sigmatropic Phenyl and Para-Substituted-Phenyl Rearrangements in 3, 4-Bis (p-substituted-phenyl)-1, 2, 5-triphenyl-1, 3-cyclopentadien-1-ols and 1-(p-substituted phenyl)-2, 3, 4, 5-tetraphenyl-2, 4-cyclopentadien-1-ols," *J. Org. Chem.*, **45**, 3910 (1980).

2. Oldaker, G.B. III; Rosenquest, J.M.; and Purcell, R.Y. "Quality Assurance Evaluation of Transmissometers" pp. 285-292 in *Proceedings: Continuous Emission Monitoring: Design, Operation and Experience*. Specialty Conference, Rocky Mountain States Section, Air Pollution Control Association, November 1981.
3. Oldaker, G.B. III *An Update and Discussion of the Critical Aspects of Proposed EPA Reference Method 6B*, July 1982, U.S. EPA CEM Report Series Number: 5-411-7/82.
4. Oldaker, G.B. III; and Peeler, J.W. *Monitor Performance Tests for Pollutant and Diluent Gas Monitors: Reporting Requirements, Report Format, and Review Procedures*, EPA 340/1-83-013, January 1983.
5. Margeson, J.H.; Knoll, J.E.; Midgett, M.R.; Oldaker, G.B. III; Loder, K.R.; Grohse, P.M.; and Gutknecht, W.F. "Integrated Method for Determining NO_x Emissions at Nitric Acid Plant," *Anal. Chem.*, **56**, 2607-2610 (1984).
6. Margeson, J.H.; Knoll, J.E.; Midgett, M.R.; Oldaker, G.B. III; and Reynolds, W.E. "Determinations of Sulfur Dioxide, Nitrogen Oxides, and Carbon Dioxide in Emissions from Electric Utility Plants by Alkaline Permanganate Sampling and Ion Chromatography," *Anal. Chem.*, **57**, 1586-1590 (1985).
7. DeWees, W.G.; Segall, R.R.; Oldaker, G.B. III "Method 7A-Determination of Nitrogen Oxide Emissions from Stationary Sources (Grab Sampling-Ion Chromatographic Method), Section 3.14" in *Quality Assurance Handbook for Air Pollution Measurement Systems, Vol. III, Stationary Source Specific Methods*. EPA-600/4-77-027b, August 1977.
8. Estes, E.D.; Hardison, D.L.; Oldaker, G.B. III; Butler, F.E.; Knoll, J.E.; and Midgett, M.R. "Evaluation of Reference Methods for Measurement of Carbon Monoxide Emissions at Refineries," *Anal. Chem.*, **58**, 945-950 (1986).
9. Oldaker, G.B. III; Conrad, F.W., Jr. "Estimation of Effect of Environmental Tobacco Smoke on Air Quality within Passenger Cabins of Commercial Aircraft," *Environ. Sci. Technol.*, **21**, 994-999 (1987).
10. Oldaker, G.B. III; Perfetti, P.F.; Conrad, F.W., Jr.; Conner, J.M.; McBride, R.L. "Results from Surveys of Environmental Tobacco Smoke in Offices and Restaurants," pp. 99-104 in *Indoor Air Quality (International Archives of Occupational and Environmental Health Supplement)*, Kasuga, H., Ed., Springer-Verlag, Berlin, 1990.
11. Oldaker, G.B. III "Comment on 'Evaluation of the Effect of Environmental Tobacco Smoke in Airliner Cabin Air Quality'," *Environ. Sci. Technol.*, **22**, 1238-1240 (1988).

12. Oldaker, G.B. III; Stancill, M.W.; Conrad, F.W., Jr.; Collie, B.B.; Fenner, R.A.; Lephardt, J.O.; Baker, P.G.; Lyons-Hart, J.; Parrish, M.E. "Estimation of Effect of Environmental Tobacco Smoke on Air Quality within Passenger Cabins of Commercial Aircraft. II," pp. 447-454 in *Indoor Air Quality and Ventilation*, Lunau, F.; and Reynolds, G.C., Eds., Selper, London, 1990.
13. Oldaker, G.B. III; Crouse, W.E.; DePinto, R.M. "On the Use of Environmental Tobacco Smoke Component Ratios," pp. 287-290 in *Present and Future of Indoor Air Quality, Proceedings of the Brussels Conference*, Excerpta Medica International Congress Series, Amsterdam, Bieva, C.J.; Courtois, Y.; and Govaerts, M., Eds., 1989.
14. Oldaker, G.B. III; Stancill, M.W.; Conrad, F.W., Jr.; Morgan, W.T.; Collie, B.B.; Fenner, R.A.; Lephardt, J.O.; Baker, P.G.; Lyons-Hart, J.; Parrish, M. E. "Results from a Survey of Environmental Tobacco Smoke in Hong Kong Restaurants," submitted to *Environ. Internat.*
15. Conner, J.M.; Oldaker, G.B. III; and Murphy, J.J. "Method for Assessing the Contribution of Environmental Tobacco Smoke to Respirable Suspended Particles in Indoor Environments," *Environ. Technol.*, **11**, 189-196 (1990).
16. Crouse, W.E.; Ireland, M.S.; Johnson, J.M.; Striegel, R.M., Jr.; Williard, C.S.; DePinto, R.M.; Oldaker, G.B. III; and McBride, R.L. "Results from a Survey of Environmental Tobacco Smoke (ETS) in Restaurants," pp. 214-222 in *Transactions: Combustion Processes and the Quality of the Indoor Environment*, J.P. Harper, Ed., Air and Waste Management Association, Pittsburgh, PA, 1990.
17. Ogden, M.W.; Nystrom, C.W.; Oldaker, G.B. III; and Conrad, F.W., Jr. "Evaluation of Personal Passive Sampling Device for Determining Exposure to Nicotine in Environmental Tobacco Smoke," pp. 552-558 in *Proceedings of the Environmental Protection Agency/Air and Waste Management Association International Symposium on Measurement of Toxic and Related Air Pollutants*, 1989.
18. Oldaker, G.B. III; and Conrad, F.W., Jr. "Results from Measurements of Nicotine in a Tavern," pp. 577-582 in *Proceedings of the Environmental Protection Agency/Air and Waste Management Association International Symposium on Measurement of Toxic and Related Air Pollutants*, 1989, pp. 577-582.
19. Oldaker, G.B. III; Conrad, F.W., Jr.; Conner, J.M.; McConnell, B.C.; Ogden, M.W.; Perfetti, P.F.; Crouse, W.E.; and Fenner, R.A. "Surveys of Environmental Tobacco Smoke in Offices and Restaurants in New York City," *Beitr. Tabakforsch.*, in press.
20. Oldaker, G.B. III "Environmental Tobacco Smoke in Passenger Cabins of Commercial Aircraft," *Journal of the National Cancer Institute*, **81** (18), 1424-1425 (1989).

21. Crouse, W.E.; and Oldaker, G.B. III "Comparison of Area and Personal Sampling Methods for Determining Nicotine in Environmental Tobacco Smoke," submitted for publication in *Proceedings of the 1990 EPA/A&WMA International Symposium on the Measurement of Toxic and Related Air Pollutants*.
22. Nelson, P.R.; Heavner, D.L.; and Oldaker, G.B. III "Problems with the Use of Nicotine as a Predictive Environmental Tobacco Smoke Marker," submitted for publication in *Proceedings of the 1990 EPA/A&WMA International Symposium on the Measurement of Toxic and Related Air Pollutants*.
23. Oldaker, G.B. III; Ogden, M.W.; Maiolo, K.C.; Conner, J.M.; Conrad, F.W., Jr.; and DeLuca, P.O. "Results from Surveys of Environmental Tobacco Smoke in Restaurants in Winston-Salem, North Carolina," pp. 281-285 in *Proceedings of the 5th International Conference on Indoor Air Quality and Climate*, Vol.2, Canada Mortgage and Housing Corporation, Ottawa, Canada, 1990.
24. Ogden, M.W.; Maiolo, K.C.; Oldaker, G.B. III; Conrad, F.W., Jr.; Conner, J.M.; and DeLuca, P.O. "Evaluation of Methods for Estimating the Contribution of ETS to Levels of Respirable Suspended Particles," pp. 415-420 in *Proceedings of the 5th International Conference on Indoor Air Quality and Climate*, Vol. 2, Canada Mortgage and Housing Corporation, Ottawa, Canada, 1990.

PATENT

1. McConnell, B.C.; Oldaker, G.B. III; Walsh, R.F. "Air Sampling Device," United States Patent, Patent No. 4,786,472, November 22, 1988.